BURDEN OF UNCONTROLLED EPILEPSY IN PATIENTS REQUIRING AN EMERGENCY ROOM VISIT OR HOSPITALIZATION

Simona Balestrini, Leandro Provinciali, Ancona, Italy:

Manjunath et al.¹ performed a cost analysis related to patients with epilepsy and found that those with uncontrolled epilepsy who required an emergency department (ED) visit or hospitalization posed clinical and economic burdens to health care providers and to society. We conducted a prospective study to analyze the burden of epilepsy at a regional hospital. In an attempt to develop a hypothetical prediction model, we evaluated factors associated with ED access by patients with an already-known diagnosis of epilepsy after a new seizure episode. In our analysis, we focused on direct health care costs by constructing a logistic model to predict ED visit. Factors related to ED visit were nationality, current psychiatric therapy, current antiepileptic drug polytherapy, comorbidities, recurrent same-day epileptic seizures, and seizure characteristics. A care model—based on knowledge of these predictive factors—could help to reduce the economic burden of uncontrolled epilepsy. In an era of increasing health care costs and shrinking resources, economic studies applied to health services are vital to increasing the awareness of how epilepsy affects individuals and society.²

1. Manjunath R, Paradis PE, Parisé H, et al. Burden of uncontrolled epilepsy in patients requiring an emergency room visit or hospitalization. *Neurology* 2012;79:1908–1916.
2. Goodacre SW, Wilson RW, Bradburn M, Santarelli M, Nicholl JP. Health utility after emergency medical admission: a cross-sectional survey. *Health Qual Life Outcomes* 2012;10:20.

Selim R. Benbadis, Tampa, FL: This study highlighted the consequences of epilepsy, and specifically the dramatic difference between controlled and uncontrolled epilepsy.¹ While the majority of patients with epilepsy are well-controlled, the roughly 30% who are uncontrolled comprise most of the complications, injuries, and expenditures. Some of the evaluation tools (EEG-video, MRI) and treatments for intractable epilepsy (surgery, vagus nerve stimulation) are viewed as expensive,² leading insurers to sometimes deny them. However, considering the indirect costs associated with complications, the "up-front" cost may be worthwhile if it can prevent subsequent problems. This is a strong argument for a more aggressive approach to intractable seizures vs complacency, which leads, for example, to very long delays seen before epilepsy surgery.³ The results are different from but consistent with studies on nonadherence.^{4,5}

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1. Manjunath R, Paradis PE, Parisé H, et al. Burden of uncontrolled epilepsy in patients requiring an emergency room visit or hospitalization. *Neurology* 2012;79:1908–1916.
2. Benbadis SR, Tatum WOIV, Vale FL. When drugs don't work: an algorithmic approach to medically intractable epilepsy. *Neurology* 2000;55:1780–1784.
3. Benbadis SR, Heriaud L, Tatum WO, Vale F. Epilepsy surgery, delays and referral patterns—are all your epilepsy patients controlled? *Seizure* 2003;12:167–170.
4. Faught RE, Weiner JR, Guérin A, Cunnington MC, Duh MS. Impact of nonadherence to antiepileptic drugs on health care utilization and costs: findings from the RANSOM study. *Epilepsia* 2009;50:501–509.
5. Faught E, Duh MS, Weiner JR, Guérin A, Cunnington MC. Nonadherence to antiepileptic drugs and increased mortality: findings from the RANSOM Study. *Neurology* 2008;71:1572–1578.

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Simona Balestrini, Selim R. Benbadis and Leandro Provinciali

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